## Contents of Volume 78


PAGE

ATKINSON, A. C. (See PONCE DE LEON, A. C.)

BAI, Z. D. and CHOW, M. Inadmissibility of the maximum likelihood estimator in the sequential estimation of the size of a population . . . . . 817

BALLERINI, R. (See VECCHIA, A. V.)

BARNDORFF-NIELSEN, O. E. Modified signed log likelihood ratio . . . . 557

BASSIAKOS, Y. C., MENG, X.-L. and LO, S.-H. A general estimator of the treatment effect when the data are heavily censored . . . . . 741

BEAL, S. L. Computing initial estimates with mixed effects models: A general method of moments . . . . . 217

BEATH, K. J. and DOBSON, A. J. Regression to the mean for nonnormal populations . . . . . 431

BERGER, J. O. (See YE, K.)

BESAG, J. and CLIFFORD, P. Sequential Monte Carlo $p$-values . . . . 301

BHATTACHARJEE, S. K. and DUNSMORE, I. R. The influence of variables in a logistic model . . . . . 851

BOMZE, I. M. (See RESCHENHOFER, E.)

BOOS, D. D. (See ZHANG, J.)

BRADLEY, R. A. (See STEWART, F. P.)

BROWN, P. J. and OMAN, S. D. Double points in nonlinear calibration . . 33

BUCKLEY, M. J. Detecting a smooth signal: Optimality of cusum based procedures 253

CATCHPOLE, E. A. and MORGAN, B. J. T. A note on Seber's model for ring-recovery data . . . . . 917

CHALONER, K. Bayesian residual analysis in the presence of censoring . . 637

CHAN, L.-Y. Optimal design for estimation of variance in nonparametric regression using first oder differences . . . . . 926

CHANDRA, T. K. (See MUKERJEE, R.)

CHENG, C.-L. and NESS, J. W. VAN On the unreplicated ultrastructural model 442

CHENG, C.-S. and STEINBERG, D. M. Trend robust two-level factorial designs 325

CHESHER, A. The effect of measurement error . . . . . 451

CHHIKARA, R. A. (See DENG, L.-Y.)

CHIU, S.-T. The effect of discretization error on bandwidth selection for kernel density estimation . . . . . 436

CHOW, M. (See BAI, Z. D.)

CLIFFORD, P. (See BESAG, J.)

COAD, D. S. Sequential tests for an unstable response variable . . . 113

CORDEIRO, G. M. and FERRARI, S. L. DE P. A modified score test statistic having chi-squared distribution to order $n^{-1}$ . . . . . 573

CORMACK, R. M. and JUPP, P. E. Inference for Poisson and multinomial models for capture-recapture experiments . . . . . 911

COX, T. F. and FERRY, G. Robust logistic discrimination . . . . . 841

CRITCHLEY, F. and VITIELLO, C. The influence of observations on misclassification probability estimates in linear discriminant analysis . . 677

DANIELS, H. E. and YOUNG, G. A. Saddlepoint approximation for the studentized mean, with an application to the bootstrap . . . . . 169

DAS, A. and KAGEYAMA, S. A class of *E*-optimal proper efficiency-balanced designs . . . . . 693
DEAN, A. M. (See LEWIS, S. M.)
DE LEEUW, J. and VAN DER HEIJDEN, P. G. M. Reduced rank models for contingency tables . . . . . 229
DENG, L.-Y. and CHHIKARA, R. S. On asymptotically design-unbiased estimators of a finite population mean . . . . . 189
DICICCIO, T. J. and FIELD, C. A. An accurate method for approximate conditional and Bayesian inference about linear regression models from censored data 903
DICICCIO, T. J. and MARTIN, M. A. Approximations of marginal tail probabilities for a class of smooth functions with applications to Bayesian and conditional inference . . . . . 891
DIETRICH, C. R. Modality of the restricted likelihood for spatial Gaussian random fields . . . . . 833
DO, K.-A. and HALL, P. On importance resampling for the bootstrap . . 161
DOBSON, A. J. (See BEATH, K. J.)
DONEGANI, M. An adaptive and powerful randomization test . . . . 930
DUNSMORE, I. R. (See BATTACHARJEE, S. K.)
FERNANDES, J. M. (See QUINN, B. G.)
FERRARI, S. L. DE P. (See CORDEIRO, G. M.)
FERRY, G. (See COX, T. F.)
FIELD, C. A. (See DICICCIO, T. J.)
FIRTH, D., GLOSUP, J. and HINKLEY, D. V. Model checking with nonparametric curves . . . . . 245
FIRTH, D. and HARRIS, I. R. Quasi-likelihood for multiplicative random effects 545
FRASER, D. A. S., GUTTMAN, I. and SRIVASTAVA, M. S. Conditional inference for treatment and error in multivariate analysis . . . . . 565
FRISÉN, M. and MARÉ, J. DE. Optimal surveillance . . . . . 271
FUJIKOSHI, Y. and RAO, C. R. Selection of covariables in the growth curve model 779
GANGOPADHYAY, A. K. (See PAWITAN, Y.)
GELFAND, A. E. and KUO, L. Nonparametric Bayesian bioassay including ordered polytomous response . . . . . 657
GLOSUP, J. (See FIRTH, D.)
GODAMBE, V. P. Orthogonality of estimating functions and nuisance parameters 143
GOLDSTEIN, H. Nonlinear multilevel models, with an application to discrete response data . . . . . 45
GUILKEY, D. K. and SCHMIDT, P. An interpolation test for a unit root in the presence of drift . . . . . 809
GUNST, R. F. (See WELLMAN, J. M.)
GUTTMAN, I. (See FRASER, D. A. S.)
HAITOVSKY, Y. (See ZELEN, M.)
HALL, P., SHEATHER, S. J., JONES, M. C. and MARRON, J. S. On optimal data-based bandwidth selection in kernel density estimation . . . . 263
HALL, P. (See DO, K.-A.)
HARRINGTON, D. P. (See LIPSITZ, S. R.)
HARRIS, I. R. (See FIRTH, D.)
HARRISON, J. and WEST, M. Dynamic linear model diagnostics . . . . 797
HENDERSON, R. and MILNER, A. On residual plots for relative risk regression 631

HINKLEY, D. V. (See FIRTH, D.)
HIROTSU, C. An approach to comparing treatments based on repeated measurements . . . . . 583
HURVICH, C. M. and TSAI, C.-L. Bias of the corrected AIC criterion for underfitted regression and time series models . . . . . 499
JENNISON, C. and TURNBULL, B. W. Exact calculations for sequential $t$, $\chi^2$ and $F$ tests . . . . . 133
JENSEN, S. T., JOHANSEN, S. and LAURITZEN, S. L. Globally convergent algorithms for maximizing a likelihood function . . . . . 867
JOHANSEN, S. (See JENSEN, S. T.)
JONES, M. C. Kernel density estimation for length biased data . . . . . 511
JONES, M. C. (See HALL, P.)
JUPP, P. E. (See CORMACK, R. M.)
KAGEYAMA, S. (See DAS, A.)
KATSURA, K. (See OGATA, Y.)
KAVALIERIS, L. A note on estimating autoregressive-moving average order . 920
KAY, J. W. (See THOMPSON, A. M.)
KEEN, K. J. and SRIVASTAVA, M. S. The asymptotic variance of the interclass correlation coefficient . . . . . 225
KENT, J. T. (See MARDIA, K. V.)
KIM, D. A Bayesian significance test of the stationarity of regression parameters 667
KNOWLES, M., SIEGMUND, D. and ZHANG, H. Confidence regions in semilinear regression . . . . . 15
KRIEGER, A. M. (See PFEFFERMANN, D.)
KUNERT, J. Cross-over designs for two treatments and correlated errors . . 315
KUO, L. (See GELFAND, A. E.)
LAIRD, N. M. (See LIPSITZ, S. R.)
LAURITZEN, S. L. (See JENSEN, S. T.)
LEFRANÇOIS, B. Detecting over-influential observations in time series . . 91
LENK, P. J. Towards a practicable Bayesian nonparametric density estimator 531
LEWIS, S. M. and DEAN, A. M. On general balance in row-column designs 595
LI, W. K. Testing model adequacy for some Markov regression models for time series . . . . . 83
LI, W. K. Some Lagrangean multiplier tests for seasonal differencing . . 381
LIN, D. Y. Nonparametric sequential testing in clinical trials with incomplete multivariate observations . . . . . 123
LIPSITZ, S. R., LAIRD, N. M. and HARRINGTON, D. P. Generalized estimating equations for correlated binary data: Using the odds ratio as a measure of association . . . . . 153
LO, S.-H. (See BASSIAKOS, Y. C.)
LOADER, C. R. Inference for a hazard rate change point . . . . . 749
MARDIA, K. V. and KENT, J. T. Rao score tests for goodness of fit and independence . . . . . 355
MARÉ, J. DE (See FRISÉN, M.)
MARRON, J. S. (See HALL, P.)
MARTIN, M. A. (See DICICCIO, T. J.)
MARZEC, L. and MARZEC, P. On testing the equality in dispersion of two probability distributions . . . . . 923

MARZEC, P. (See MARZEC, L.)
MENG, X.-L. (See BASSIAKOS, Y. C.)
MILNER, A. (See HENDERSON, R.)
MORGAN, B. J. T. (See CATCHPOLE, E. A.)
MORTON, R. Analysis of extra-multinomial data derived from extra-Poisson variables conditional on their total . . . . . 1
MUKERJEE, R. and CHANDRA, T. K. Bartlett-type adjustment for the conditional likelihood ratio statistic of Cox and Reid . . . . . 365
MÜLLER, H.-G. Smooth optimum kernel estimators near endpoints . . 521
NAGELKERKE, N. J. D. A note on a general definition of the coefficient of determination . . . . . 691
NAYAK, T. K. Estimating the number of component processes of a superimposed process . . . . . 75
NESS, J. W. VAN (See CHENG, C.-L.)
OGATA, Y. and KATSURA, K. Maximum likelihood estimates of the fractal dimension for random spatial patterns . . . . . 463
OH, C., SEVERO, N. C. and SLIVKA, J. Approximations to the maximum likelihood estimate in some pure birth processes . . . . . 295
OMAN, S. D. Multiplicative effects in mixed model analysis of variance . . 729
OMAN, S. D. (See BROWN, P. J.)
PANTULA, S. G. (See ZHANG, J.)
PATEL, H. I. Analysis of incomplete data from a clinical trial with repeated measurements . . . . . 609
PAWITAN, Y. and GANGOPADHYAY, A. K. Efficient bias corrected nonparametric spectral estimation . . . . . 825
PFEFFERMANN, D. and KRIEGER, A. M. Poststratification using regression estimators when information on strata means and sizes is missing . . 409
POLSON, N. G. A representation of the posterior mean for a location model 426
PONCE DE LEON, A. C. and ATKINSON, A. C. Optimum experimental design for discriminating between two rival models in the presence of prior information 601
QUINN, B. G. and FERNANDES, J. M. A fast efficient technique for the estimation of frequency . . . . . 489
QUINN, B. G. and THOMSON, P. J. Estimating the frequency of a periodic function 65
RAO, C. R. (See FUJIKOSHI, Y.)
REEVES, G. K. Estimation of contrast variances in linear models . . . 7
RESCHENHOFER, E. and BOMZE, I. M. Length tests for goodness of fit . . 207
ROBBINS, H. and ZHANG, C.-H. Estimating a multiplicative treatment effect under biased allocation . . . . . 349
RUIZ-VELASCO, S. Asymptotic efficiency of logistic regression relative to linear discriminant analysis . . . . . 235
RUSSELL, K. G. The construction of good change-over designs when there are fewer units than treatments . . . . . 305
SCHALL, R. Estimation in generalized linear models with random effects . . 719
SCHMIDT, P. (See GUILKEY, D. K.)
SCHOTT, J. R. Some tests for commn principal component subspaces in several groups . . . . . 771
SCOTT, D. W. and WAND, M. P. Feasibility of multivariate density estimates 197
SEVERO, N. C. (See OH, C.)
SHEATHER, S. J. (See HALL, P.)

SIEGMUND, D. (See KNOWLES, M.)
SIGNORINI, D. F. Sample size for Poisson regression . . . . . 446
SLIVKA, J. (See OH, C.)
SLUD, E. Relative efficiency of the log rank test within a multiplicative intensity model . . . . . 621
SMITH, P. J. Bayesian analyses for a multiple capture-recapture model . . 399
SPADY, R. H. Saddlepoint approximations for regression models . . . 879
SRIVASTAVA, M. S. (See FRASER, D. A. S.)
SRIVASTAVA, M. S. (See KEEN, K. J.)
STEIN, M. L. A new class of estimators for the reduced second moment measure of point processes . . . . . 281
STEINBERG, D. M. (See CHENG, C.-S.)
STEWART, F. P. and BRADLEY, R. A. Some universally optimal row-column designs with empty nodes . . . . . 337
SUN, J. Significance levels in exploratory projection pursuit . . . . . 759
THOMPSON, A. M., KAY, J. W. and TITTERINGTON, D. M. Noise estimation in signal restoration using regularization . . . . . 475
THOMPSON, G. L. A note on the rank transform for interactions . . . . 697
THOMPSON, S. K. Stratified adaptive cluster sampling . . . . . 389
THOMSON, P. J. (See QUINN, B. G.)
TITTERINGTON, D. M. (See THOMPSON, A. M.)
TSAI, C.-L. (See HURVICH, C. M.)
TURNBULL, B. W. (See JENNISON, C.)
VAN DER HEIJDEN, P. G. M. (See DE LEEUW, J.)
VECCHIA, A. V. and BALLERINI, R. Testing for periodic autocorrelations in seasonal time series data . . . . . 53
VITIELLO, C. (See CRITCHLEY, F.)
WAND, M. P. (See SCOTT, D. W.)
WANG, Y.-G. Gittins indices and constrained allocation in clinical trials . . 101
WELLMAN, J. M. and GUNST, R. F. Influence diagnostics for linear measurement error models . . . . . 373
WEST, M. Kernel density estimation and marginalisation consistency . . 421
WEST, M. (See HARRISON, J.)
WILD, C. J. Fitting prospective regression models to case-control data . . 705
WONG, M. Y. Bartlett adjustment to the likelihood ratio statistic for testing several slopes . . . . . 221
WU, C. F. J. Balanced repeated replications based on mixed orthogonal arrays 181
YATRACOS, Y. G. A note on Tukey's polyefficiency . . . . . 702
YE, K. and BERGER, J. O. Noninformative priors for inferences in exponential regression models . . . . . 645
YOUNG, G. A. (See DANIELS, H. E.)
ZELEN, M. and HAITOVSKY, Y. Testing hypotheses with binary data subject to misclassification errors: Analysis and experimental design . . . 857
ZHANG, C.-H. (See ROBBINS, H.)
ZHANG, H. (See KNOWLES, M.)
ZHANG, J., PANTULA, S. G. and BOOS, D. D. Robust methods for testing the pattern of a single covariance matrix . . . . . 787
ZIMMERMAN, D. Censored distance-based intensity estimation of spatial point processes . . . . . 287